

ABSTRACT OF THE DISCLOSURE

A natural gas production system prevents liquid accumulation in the wellbore and minimizes friction loading in the wellbore by maintaining production gas velocity above a critical minimum velocity. A pressurized gas is injected into the well to supplement the flow of production gas such that the velocity of the total gas flow up the well exceeds the critical velocity. A choke is fitted to the gas injection line, and total gas flows are measured by a flow meter. A flow controller compares the measured total gas flow rate against the critical flow rate, and determines a minimum gas injection rate required to maintain the total gas flow rate at or above the critical flow rate. The flow controller then adjusts the choke to achieve the desired gas injection rate. The injection gas may be recirculated production gas from the well, or a gas from a separate source.